REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I.   STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1, 2-11 and 13 are pending in this application. Claims 1, 6-9, 11 and 13 are independent, and hereby amended. Support for this amendment is provided throughout the Specification as originally filed and specifically on pages 28-29 (paragraphs [0129]-[0132]). It is submitted that these claims, as originally presented, were in full compliance with the requirements of 35 U.S.C. §112. Changes to claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicant is entitled.

II.   REJECTIONS UNDER 35 U.S.C. §112

Claims 1, 6-9, 11 and 13 are hereby amended, thereby obviating the rejections under 35 U.S.C. §112.

III.   REJECTIONS UNDER 35 U.S.C. §101

Claims 6 and 11 are hereby amended, thereby obviating the rejections under 35 U.S.C. §101.

IV.   REJECTIONS UNDER 35 U.S.C. §103(a)

Claims 1, 3-11 and 13 were rejected under 35 U.S.C. §103(a) as allegedly

unpatentable over US Patent Number 6,041,133 to Califano et al. (hereinafter, merely

"Califano") in view of US Patent Number 6,233,348 to Fujii et al. (hereinafter, merely "Fujii").

V.   RESPONSE TO REJECTIONS

Claim 1 recites, *inter alia*:

"...first generation means for generating a plurality of triangles,
each triangle connecting three points selected from the plurality of
first feature points,

wherein **in each triangle, the three points include a first point
which is selected from the sorted first feature points sorted by
the sorting means, in order of increasing distance from the
center point, and a second point which is closest to the first
point in the triangle, and a third point which is second closest
to the first point in the triangle**..." (Emphasis added)

Applicant submits that neither Califano nor Fujii, taken alone or in combination,

that would teach or suggest the above identified features of claim 1. Specifically, neither of the

references used as a basis for rejection describes in each triangle, the three points include a first

point which is selected from the sorted first feature points sorted by the sorting means, in order

of increasing distance from the center point, and a second point which is closest to the first point

in the triangle, and a third point which is second closest to the first point in the triangle, as

recited in claim 1.

Specifically, the Office Action (see page 4) asserts that Califano teaches

generating a triangle and refers to Califano, Fig. 2, and col. 5, lines 31-33.

Applicant submits that in Califano, the triplets of feature points of a given

fingerprint image are selected (See, Califano, col. 5, lines 31-33). However, **in Califano, the**

selection of the feature points is not based on the distance from the center point.

In the present invention, paragraphs [0129]-[0133] on the pages 28-29 of

Applicant's corresponding published application, which describe selecting feature points to

generate triangles, are reproduced as below:

> "[0129] In step S14, the CPU 52 generates all triangles each connecting three points closest to one another among the ridge bifurcations (in the case of this example, a maximum of 10 ridge bifurcations) which are close to the center point C (in, jn) of the fingerprint (the central point found by the processing of step S9). As mentioned above, in the case of this example, the CPU 52 generates all triangles each connecting three points closest to one another among the maximum of 10 ridge bifurcations close to the center point of the fingerprint. However, this example is not limitative, and can also be modified according to the number of ridge bifurcations detected by the processing of step S7.

> [0130] Specifically, the CPU 52 generates a triangle W1 as shown in FIG. 13 by connecting the ridge bifurcation P1 (xp1, yp1) closest to the center point C (in, jn) (the ridge bifurcation P1 is selected because the distance Lp1 from the center point C is smallest) and two ridge bifurcations P2 (xp2, yp2) and P3 (xp3, yp3) closest to the ridge bifurcation P1.

> [0131] After that, the CPU 52 generates a triangle by connecting the ridge bifurcation P2 (xp2, yp2) second closest to the center point C (the ridge bifurcation P2 is selected because the distance Lp2 from the center point C is the second smallest) and two ridge bifurcations P1 (xp1, yp1) and P3 (xp3, yp3) closest to the ridge bifurcation P2. In the case of this example, this triangle is completely the same as the above-mentioned triangle W1. In the following description, if completely the same triangle is generated, the description thereof is omitted.

> [0132] By sequentially repeating this process, a triangle W2 which connects the ridge bifurcation P3 third closest to the center point C and two ridge bifurcations P2 and P4 closest to the ridge bifurcation P3, a triangle W3 which connects the ridge bifurcation P4 fourth closest to the center point C and two ridge bifurcations P3 and P7 closest the ridge bifurcation P4, and a triangle W4 which connects the ridge bifurcation P5 fifth closest to the center point C and two ridge bifurcations P6 and P8 closest to the p5, are also generated, whereby a total of four triangles are generated. (The illustration of triangles which are respectively generated on the basis of the ridge bifurcation P6 sixth closest to the center point C, the ridge bifurcation P7 seventh closest to the center point C, and the ridge bifurcation P8 eighth closest to the center point C is omitted, because each of the triangles is superposed on any of the above-mentioned triangles W1, W2, W3 and W4.)"

Thus, in the present invention, in the <u>first generated triangle</u>, one of the selected points is <u>closest to the center point</u>; similarly, in the <u>second generated triangle</u>, one of the selected points is <u>second closest to the center point</u>; and in the <u>third generated triangle</u>, one of the selected points is <u>third closest to the center point</u>, *i.e.*, **in each triangle there is one point selected in order of increasing distance from the center point.**

Thus, nothing has been found in Califano that would teach <u>in each triangle, the three points include a first point which is selected from the sorted first feature points sorted by the sorting means, in order of increasing distance from the center point, and a second point which is closest to the first point in the triangle, and a third point which is second closest to the first point in the triangle</u>, as recited in claim 1.

Furthermore, this deficiency of Califano is not cured by the supplemental teaching of Fujii.

Therefore, Applicant respectfully submits that claim 1 is patentable.

For reasons similar to those described above with regard to independent claim 1, independent claims 6-9, 11 and 13 are also patentable.

VI.   DEPENDENT CLAIMS

The other claims in this application are each dependent from one of the independent claims discussed above and are therefore believed patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

Similarly, because Applicant maintains that all claims are allowable for at least

the reasons presented hereinabove, in the interests of brevity, this response does not comment on

each and every comment made by the Examiner in the Office Action. This should not be taken

as acquiescence of the substance of those comments, and Applicant reserves the right to address
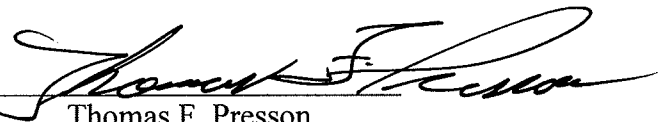
such comments.

CONCLUSION

In the event the Examiner disagrees with any of the statements appearing above

with respect to the disclosures in the cited reference, or references, it is respectfully requested

that the Examiner specifically indicate those portions of the reference, or references, providing

the basis for a contrary view.

Please charge any additional fees that may be needed, and credit any

overpayment, to our Deposit Account No. 50-0320.

In view of the foregoing remarks, it is believed that all of the claims in this

application are patentable and Applicant respectfully requests early passage to issue of the

present application.

Respectfully submitted,

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